

ed instance, is being made available, at wireline prices, as a functional substitute for fixed wireline telephone service.<sup>251</sup>

The larger issue is the extent to which mobile telephony is viewed by consumers as a substitute for wireline telecommunications.<sup>252</sup> A key aspect of our analysis of the extent to which wireless services are being used as a substitute for wireline services is to look at the prices for both types of services.<sup>253</sup> In the *First Report*, we stated that, based on available pricing data, there appeared to be a significant premium for mobile service as compared to wireline service, and that wireless telephone service prices will have to fall well over 50 percent for wireless service to be fully price-competitive with traditional telephone service.<sup>254</sup>

This remains the case. Although there are a number of lower priced cellular service packages, such as TalkAlong, as offered by Bell Atlantic and Airtouch, these services are more expensive than other wireless services because the subscriber is subject to a relatively high per minute charge for outgoing and incoming calls. Other services, such as GTE's Tele-Go, which functions as a cordless phone within the subscriber's home, and as a cellular phone outside the subscriber's home, is closer to the model of a fully wireless communications tool. However, it still requires the landline network for calls made from the home. In addition, Tele-Go includes different charges for calls made from home than for those made as a cellular phone.<sup>255</sup>

Thus, the primary obstacle to classifying wireless as a potential substitute for wireline telephony is the per minute charge. Some analysts believe that if cellular providers substantially decrease their per minute charges, they may spur increased usage and, therefore, compensate for

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<sup>251</sup> We note that the Bureau was careful to observe that the waiver "present[ed] special circumstances because it affects a relatively small number of customers . . .", *id.*, and that the service would be provided on an interim basis. *Id.* at para. 17. The cellular service is also provided to subscribers at landline rates, rather than cellular rates. *Id.*

<sup>252</sup> One analyst has estimated that of all telecommunications minutes, wireline and wireless together, only 2.5 percent of those are from wireless calls. J. Bensché, *Coming Supply Glut*, Bensché-Marks, Vol. 96-07, June 24, 1996. Bensché derives this number based on 160 million landlines, averaging 1,000 minutes per month per line, and 35 million cellular subscribers, averaging 120 minutes per month per subscriber. *Id.*

<sup>253</sup> In the *First Report*, we stated our interest in comparing wireless telephone service prices to wireline prices because there was some conjecture that wireless services can eventually compete with wireline telephone service, and any such competition would be a major pro-competitive development in the telecommunications business. See *First Report*, 10 FCC Rcd at 8869-70 (para. 75).

<sup>254</sup> *Id.*

<sup>255</sup> See Section III.B.1.c., *supra*.

the lower charge.<sup>256</sup> The average length of a cellular call in June, 1996 was 2.24 minutes.<sup>257</sup> This would suggest that the measured service of cellular rate plans continues to constrain subscribers' use of the wireless phone because of the per minute charge they must pay for doing so. The overall price for wireless service is still well in excess of wireline telephony. This is likely to change, however, as additional spectrum is allocated for mobile services and more service providers compete for customers.

The services offered by the few operating broadband PCS carriers are currently priced closer to cellular service than to comparable wireline services and therefore it is too early to state that broadband PCS providers' offerings might be perceived as a wireline substitute. Again, the prices on a monthly and per minute basis exceed those of the average wireline monthly telephone service charge.<sup>258</sup> Nevertheless, PCS providers appear to be positioning their service offerings to become similar to wireline service, as evidenced by the fact that APC, Western Wireless, and BellSouth are not charging for the first minute of incoming calls, and by the availability of a significant number of value-added services. Based on the volume of outgoing and incoming calls to PCS subscribers, APC's and Western Wireless's subscribers appear more willing to disclose their PCS phone numbers to other people because of the reduced cost of accepting an incoming phone call. This suggests that these subscribers are more inclined to use their phones as a general communications device and not just for special or emergency communications.

On a more fundamental basis, however, CMRS competition with wireline providers may depend on the extent to which CMRS providers have access to the wireline network. Interconnection between CMRS and LECs is a significant factor in the long term success of CMRS becoming competitive with and a functionally equivalent substitute for wireline communications. Interconnection charges that address the actual costs of interconnection will allow CMRS providers and wireline providers to compete based not on some cost advantage stemming from control

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<sup>256</sup> Some analysts posit that more and more carriers, particularly PCS providers, may adopt this approach. See e.g., *DLJ* at 6. For example, *DLJ* states that some C Block PCS providers' plans project multiples of current usage levels as a result of much lower per minute pricing. According to *DLJ*, instead of the 125-150 minutes of use per month common among cellular customers, PCS providers believe that the elasticity of demand to lower pricing can allow them to achieve 1,000 minutes per month generated by residential landline users, on the theory that the differences in usage exist primarily because cellular service is too expensive to use as a landline substitute. *Id.*

→ <sup>257</sup> CTIA SURVEY.

<sup>258</sup> In 1995, the average monthly cellular bill was \$51, but the average monthly residential wireline rate in 1995 was \$19.54. See Federal Communications Commission, Statistics of Communications Common Carriers, 1995/1996 Edition, FCC Web Site (FCC-State Link).

of monopoly-based facilities, but on the services they offer.<sup>259</sup> Similarly, the ability to carry a telephone number from one service provider, whether they be wireline or wireless, to another provider is an important element in the transition of CMRS services from a complementary telecommunications service to a competitive equivalent to wireline services. As discussed below in Section IV, the Commission has taken steps during the past year to facilitate interconnection and number portability.

#### IV. COMMISSION INITIATIVES AFFECTING CMRS COMPETITION

The Commission has commenced or recently completed a number of regulatory initiatives with the objective of promoting CMRS competition and expediting the deployment of CMRS. These actions are expected to facilitate the provision of a wider range of CMRS services of greater quality and at lower prices. Along with other Commission actions, they have already stimulated the communications industry and further fueled wireless investment.

The Commission continues to allocate more spectrum that can be used to provide CMRS.<sup>260</sup> In March 1996, we released a *Spectrum Plan* indicating how we plan to make spectrum being transferred from Federal Government use available for private sector use.<sup>261</sup> The process of implementing this Plan is underway and, by the year 2000, could make an additional 70 megahertz of spectrum in the 1.3-1.6 GHz, and the 3.6 GHz bands available for CMRS. These additional spectrum allocations should expand the quantity, quality, and variety of wireless services, increase the number of CMRS providers and, ultimately, lead to lower prices for consumers.

The Commission has made extensive use of its auction authority as the most efficient means of assigning this newly-allocated spectrum to providers who will deploy services for use by the public as quickly as possible, while recovering a portion of the value of the public spec-

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<sup>259</sup> Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98; and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, CC Docket No. 95-185, First Report and Order, FCC 96-325, 11 FCC Rcd 15499 (1996) (*Section 251 and 252 Proceeding*).

<sup>260</sup> Chart 3 summarizes CMRS spectrum allocations as of the enactment of the Omnibus Budget Reconciliation Act of 1993, current allocations, and projected allocations in 2000.

<sup>261</sup> The Commission's *Spectrum Plan* discusses the allocation of an additional 185 megahertz of spectrum from the Federal to the private sector, establishes the scope and timing of future rulemaking proceedings to assign this reallocated spectrum, and aggregates into four groups the 12 frequency bands that comprise the total amount of spectrum to be transferred. See, Plan for Reallocated Spectrum, FCC 96-125, released Mar. 22, 1996

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
 Washington, D.C. 20554

In the Applications of	)	
	)	
NYNEX Corporation	)	
Transferor,	)	
	)	
- and -	)	File No. NSD-L-96-10
	)	
Bell Atlantic Corporation	)	
Transferee,	)	
	)	
For Consent to Transfer Control	)	
of NYNEX Corporation and Its	)	
Subsidiaries	)	

**MEMORANDUM OPINION AND ORDER**

Adopted: August 14, 1997

Released: August 14, 1997

By the Commission: Commissioners Quello and Chong issuing separate statements.

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and exchange access services in the New York City metropolitan market with approximately 250 miles of fiber optic cable.<sup>193</sup>

88. Nevertheless, the financial capabilities of these larger CAPs are limited compared to those of Bell Atlantic, AT&T, MCI, and Sprint. (TCG had 1996 gross revenues of \$267.7 million in 1996 and a net loss of \$114.9 million.<sup>194</sup> MFS had 1996 revenues of \$4.49 billion and a net loss of \$2.2 billion.<sup>195</sup>) Both companies are experiencing substantial growth in their core business. Although reputation among the existing customer base is an important asset to a CAP, Bell Atlantic's market research indicates that the CAPs have a limited brand name reputation among residential and small business customers in LATA 132.<sup>196</sup> We have no reason to believe that CAPs would have a stronger brand reputation in other parts of the New York metropolitan area. Because of their relatively limited access to capital and their low brand name recognition among small business and residential customers, we are unpersuaded by the Applicants that CAPs are, either singularly or as a class, likely to have significant competitive impact in the relevant markets. Accordingly, while this is a close case, we do not consider even the larger CAPs among the most significant market participants in terms of their ability quickly to enter and serve the relevant markets.

89. *Mobile Telephone Service Providers.* Providers of mobile telephone service via radio consist primarily of cellular and broadband Personal Communications Services licensees, but also include digital specialized mobile radio providers. Several of these firms have formidable financial resources and are recognized and regarded favorably by both wireless and wireline users. Among the principal wireless providers that currently compete in LATA 132 and the New York metropolitan area are AT&T, Sprint Telecommunications Venture, SBC, Omnipoint, Nextel, and Bell Atlantic-NYNEX Mobile ("BAMS-NYNEX Mobile"), a joint venture involving the Applicants. As explained below, this competition takes place in a market distinguishable from the relevant markets at issue in this proceeding.

90. Mobile telephone service providers are currently positioned to offer products that largely complement, rather than substitute for, wireline local exchange.<sup>197</sup> These providers utilize spectrum whose carrying capacity is relatively finite. There are economic and technical limits to increasing spectrum reuse through reduction in cell size and use of compression and encoding techniques. Additionally, their installed technology and facilities

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<sup>193</sup> *Id.* at 33, n.80.

<sup>194</sup> Teleport Communications Group, *1996 Annual Report* 49 (1997).

<sup>195</sup> MFS Communications Company, Inc., *1996 Annual Report* 27 (1997).

<sup>196</sup> See Appendix E ¶ 67.

<sup>197</sup> *Second Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, FCC 97-75, ¶¶ 53 - 55, (rel. Mar. 6, 1997).

are specialized for use in mobile communications. These factors limit the ability of wireless carriers to compete on a mass market scale with wireline providers in the local exchange and exchange access services market. Although the Applicants predict that some of these providers will become competitors to wireline providers, the Applicants recognize that, as stated *supra*, such competition is currently precluded as a practical matter by the higher prices that mobile telephone service providers can charge. Thus, only if wireline prices were to increase or other factors caused wireless prices to decline materially, would this class of entrants become viable competitors in the relevant market. Accordingly, we are unpersuaded by the Applicants and CFA that mobile telephone service providers are, at this time, either singularly or as a class, significant market participants; they lack the requisite incentives and access to facilities that would allow them to compete effectively in the relevant market. We are mindful, however, of the possibility that conditions could alter significantly as a result of increased spectrum being made available (either through reallocation or through developments in mobile and fixed wireless technologies), major pricing shifts as a result of competition, or the alteration of consumer perceptions as to the substitutability of wireless for wired telephony.

91. We do believe that fixed wireless may ultimately become a viable (and, in some markets, a formidable) substitute for wireline service, but whether that occurs depends on spectrum availability, technological issues, and other future events. Fixed wireless service for the mass market will be among the potential applications that will benefit as more spectrum becomes available for wireless or is used more efficiently, and as this Commission continues to allocate and license such spectrum. These regulatory proceedings and the business rollout for such new competitors, however, will take considerable time. Neither the Applicants nor AT&T, the largest wireless carrier in this country, nor any other party has submitted any evidence on the underlying business and technological issues pertaining to near term prospects for wireless competition in the relevant markets.

92. We also reject CFA's arguments that: (1) the grant of the application to transfer the relevant authorizations would eliminate wireless as an effective competitive threat in the Applicants' markets for local exchange and exchange access services;<sup>198</sup> and (2) a combination of the Applicant's wireless services will inhibit the development of competition in the wireless industry. Within their wireline service areas, the Applicants hold no more than one block<sup>199</sup> of the currently issued licenses, and are constrained by our CMRS spectrum cap in their ability to acquire additional licenses. Multiple blocks of licenses have been issued to other companies expected to compete with the Applicants' wireless operations. Accordingly, we find that divestiture is unnecessary to promote effective wireless-wireline competition. Moreover, CFA's general concerns about prospects for competition in wireless services ignore the fact that the vast majority of the Applicant's wireless license holdings are already jointly

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<sup>198</sup> Consumer Federation of America, Petition to Deny, Sept. 23, 1996, at 5.

<sup>199</sup> "Block" as used here signifies an individual assignment of spectrum to cellular and broadband PCS firms.

operated; the Commission is considering an appeal of this decision and it would be inappropriate to address the issue here.

93. *Non-Adjacent Out-of-Region Bell Companies.* We do not doubt that non-adjacent out-of-region Bell Companies have financial strength and expertise in providing local exchange and exchange access services. This expertise should permit them to enter LATA 132 and the New York metropolitan area via resale and unbundled network elements. The fact that each Applicant contemplated entry into the other's territory supports the inference that other Bell Companies may contemplate entry into such attractive markets as LATA 132. No party, however, has shown that any one of those companies, or that those companies as a class, have a broadly recognized brand name and reputation for quality service, and/or an existing customer base in the mass market in LATA 132 or the New York metropolitan area. Accordingly, we view them as precluded competitors in LATA 132, but not among the most significant market participants.

94. *Conclusion.* We conclude that five companies -- NYNEX, AT&T, MCI, Sprint, and Bell Atlantic -- are the most significant market participants in LATA 132. NYNEX is an actual competitor in the market for local exchange and exchange access services to small business and residential customers, and a precluded competitor in the market for bundled local exchange, exchange access, and long distance services to small business and residential customers. AT&T, MCI, Sprint, and Bell Atlantic are each precluded competitors, and among the most significant market participants, in both these relevant markets. We find that although many other companies are precluded competitors, and some may be actual market participants in one or both of the relevant markets, no other company is among the most significant market participants in either of the relevant markets. We note that because our identification of the most significant market participants focuses on those carriers that have the greatest capabilities and incentives to compete most effectively and soonest, our evaluation does not in any way indicate any opinion as to the long term viability of other market participants as competition develops over time in the relevant markets.

#### D. Analysis of Competitive Effects

95. Having identified the relevant markets and the most significant market participants, we now examine the competitive effects of the merger. There are several reasons we believe that some competitive effects -- those producing an increase in market power, or an enhanced ability to maintain market power -- will generally not be in the public interest, even when the exercise of market power arguably is constrained by regulation. The 1996 Act set a clear national policy that competition leading to deregulation, rather than continued regulation of dominant firms, shall be the preferred means for protecting consumers.<sup>200</sup> Mergers that increase market power or retard the decline of market power conflict with this policy by maintaining rather than decreasing, the need for continued regulation. A merger

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<sup>200</sup> Joint Statement of Managers, S. Conf. Rep. No. 104-230, at 1 (1996).



Before the  
Federal Communications Commission  
Washington, D.C. 20554

In re Applications of	)	
	)	
Pittencrieff Communications, Inc.	)	
Transferor,	)	
	)	
and	)	CWD No. 97-22
	)	
Nextel Communications, Inc.	)	
Transferee,	)	
	)	
For Consent to Transfer Control of	)	
Pittencrieff Communications, Inc.	)	
and its Subsidiaries	)	
	)	
	)	

### MEMORANDUM OPINION AND ORDER

Adopted: October 24, 1997

Released: October 24, 1997

By the Chief, Wireless Telecommunications Bureau:

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#### APPENDIX A: DISTRIBUTION OF CONTROL OVER SMR CHANNELS BY MARKET

##### I. INTRODUCTION AND EXECUTIVE SUMMARY

1. We have before us applications filed by Nextel Communications, Inc. ("Nextel") and Pittencrieff Communications, Inc. ("PCI") pursuant to Section 310(d) of the Communications Act of 1934, as amended ("the Communications Act").<sup>1</sup> Section 310(d) of the Communications Act requires that, before control over any radio construction permit, station license, or any rights thereunder may be transferred, we must determine whether the public interest, convenience and necessity will be served by the transfer of control. The applicants seek our consent to transfer ultimate control over certain FCC authorizations held by PCI and its subsidiaries to Nextel in connection with the proposed merger of Nextel and PCI. Under the terms of their merger agreement, PCI would become a wholly-owned subsidiary of Nextel.

2. Both companies currently provide instant two-way voice dispatch ("dispatch") and two-way, interconnected mobile voice communications ("mobile phone") services, among others, throughout certain southwestern states. Consequently, we find this merger has some potential to

<sup>1</sup> 47 U.S.C. § 310(d).

affect consumers of dispatch and mobile interconnected phone services in this region by reducing competition. We also determine, however, that most consumers in the region would benefit from the merger because it will enable Nextel to perform digital system upgrades that increase capacity and permit expanded services. Consumers will also benefit from the competitive pressures that Nextel's digital service package is likely to impose on the region's cellular and PCS carriers. Accordingly, on balance we find that the proposed transfer will serve the public interest, convenience and necessity. Thus, we grant the transfer-of-control applications.

## II. BACKGROUND

### A. Application

#### 1. Applicants

3. Nextel Communications, Inc. ("Nextel") is a leading provider of specialized mobile radio ("SMR") wireless communications services. Nextel has significant SMR spectrum holdings in and around major business and population centers in the country, including the top 50 metropolitan market areas in the United States.<sup>2</sup> As of March 31, 1997, Nextel reportedly had over 1.1 million subscribers, of whom more than 700,000 were on analog systems.<sup>3</sup> Nextel is in the process of deploying a digital wireless network of integrated communications services with a nationwide footprint. Nextel offers mobile telephone service, two-way dispatch, paging and alphanumeric short-messaging.<sup>4</sup> It also plans to offer data transmission.<sup>5</sup> Nextel also conducts business outside of the United States through its wholly-owned subsidiary, McCaw International.<sup>6</sup>

4. Pittencrieff Communications, Inc. ("PCI") is also a provider of SMR communications services, incorporated under the laws of Delaware and conducting business primarily out of its headquarters in Abilene, Texas. As of year-end 1996, PCI serviced about 92,000 subscribers in the states of Texas, New Mexico, Oklahoma, Arizona, Colorado, North Dakota, and South Dakota.<sup>7</sup> PCI offers mobile telephone, two-way dispatch, paging, telemetry,

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<sup>2</sup> Securities and Exchange Commission (S.E.C.) Form 10-K, Nextel Communications, Inc., Annual Report Pursuant to Section 13 or 15(d) of the Securities and Exchange Act of 1934, for the fiscal year ended December 31, 1996 at 2 ("Nextel Form 10-K").

<sup>3</sup> "Nextel reports 1Q net loss," Wireless Week (May 19, 1997) at 42.

<sup>4</sup> Nextel Form 10-K at 2.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at 3.

<sup>7</sup> Securities and Exchange Commission (S.E.C.) Form 10-K, Pittencrieff Communications, Inc., Annual Report Pursuant to Section 13 or 15(d) of the Securities and Exchange Act of 1934, for the fiscal year ended December 31, 1996 at 1 ("Pittencrieff Form 10-K").

and microwave communications services.<sup>8</sup> Historically, PCI has focused its SMR business strategy on channel positions and subscriber bases in rural areas and small to medium-sized cities. In recent years, PCI has expanded this strategy to include major metropolitan areas.<sup>9</sup>

## 2. Applications

5. In October 1996, Nextel and PCI (collectively, "Applicants") filed a series of Form 490 and Form 703 applications to transfer control of SMR and microwave licenses held by PCI and its subsidiaries to Nextel. Included with the ten applications was a brief statement indicating that Nextel and PCI were to be merged, with PCI becoming a wholly-owned subsidiary of Nextel Finance Company ("NFC"). Applicants filed amendments to three of the ten applications on November 15, 1996.<sup>10</sup> We issued Public Notices on November 19, 1996, December 24, 1996, and January 7, 1997 indicating acceptance of these transfer applications for filing. On December 13 and December 24, 1996, the Commission granted applications associated with the transfer of certain point-to-point microwave and PMRS licenses.<sup>11</sup> These approvals were set aside on February 13, 1996 so that the applications could be considered herein.

6. On February 24, 1997, we advised Applicants that pursuant to Section 310(d) of the Communications Act, public interest submissions were required when filing transfer-of-control applications. Nextel submitted its response on March 11. We requested further information in a letter dated May 1, to which Nextel and PCI both responded on May 15, 1997. In connection with their May 15 submissions, both parties sought confidential treatment of certain proprietary information. We granted these requests on May 21, 1997.

7. On July 24, 1997, Nextel amended its transfer-of-control applications by adding eighteen 900 MHz SMR authorizations awarded to a subsidiary of PCI in August 1996 that had been inadvertently omitted from its prior submissions. Nextel filed a request on July 25, 1997 for a waiver of the agency's public notice requirements in connection with this amendment. We denied Nextel's request and placed these 900 MHz SMR applications on public notice.<sup>12</sup> Nextel/PCI filed additional amendments to the transfer applications on August 8, requesting approval to transfer a second group of licenses previously omitted and providing for the transfer

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<sup>8</sup> Pittencieff Form 10-K at 4, 6.

<sup>9</sup> *Id.* at 1.

<sup>10</sup> These amendments covered the addition of over 200 stations, almost entirely in the under-800 MHz business band.

<sup>11</sup> See *Public Notice*, Report No. 1918 (rel. Dec. 26, 1996).

<sup>12</sup> See *Public Notice*, Report No. 1951 (rel. Aug. 5, 1997).

of pending license applications.<sup>13</sup> These amendments were placed on Public Notice on August 26, 1997.<sup>14</sup>

## B. Legal Standards

8. Our examination of a proposed transfer of control under the public interest standard of Section 310(d) requires consideration of the effects of the transfer on competition.<sup>15</sup> In addition, Sections 7 and 11 of the Clayton Act empower the Commission to disapprove acquisition of "common carriers engaged in wire or radio communications or radio transmissions of energy" "where in any line of commerce in any section of the country" the effects of such an acquisition may be "substantially to lessen competition, or to tend to create a monopoly."<sup>16</sup>

9. The courts have construed these statutory provisions to mean that the Commission has discharged its responsibility to consider the effect of a proposed merger on competition "when the Commission seriously considers the antitrust consequences of a proposal and weighs those consequences with other public interest factors."<sup>17</sup> We have discretion whether to exercise our Clayton Act authority.<sup>18</sup> We choose not to exercise it in this case because we find our jurisdiction under the Communications Act to be sufficient to address all of the competitive effects of the proposed transfer—including the issue of whether the proposed transfer may substantially lessen competition or tend to create a monopoly.<sup>19</sup>

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<sup>13</sup> These amendments cover over 130 licenses, primarily in the trunked 800 MHz SMR band, but also include stations in the business bands below 800 MHz, in the 450 MHz band, and some conventional 800 MHz SMR authorizations.

<sup>14</sup> See *Public Notice*, Report No. 1948 (rel. August 26, 1997).

<sup>15</sup> *United States v. FCC*, 652 F.2d 72, 82 (D.C. Cir. 1980) (*en banc*).

<sup>16</sup> 15 U.S.C. §§ 18, 21(a). Under the CMRS designation, both Nextel and PCI are common carriers provided that they offer interconnection to the public switched telephone network. Both do so. Nextel Form 10-K at 2 and PCI Form 10-K at 1.

<sup>17</sup> *United States v. FCC*, 652 F.2d 72, 82 (D.C. Cir. 1980) (*en banc*).

<sup>18</sup> *Id.* at 83.

<sup>19</sup> Craig O. McCaw and American Telephone and Telegraph Company. For Consent to the Transfer of Control of McCaw Cellular Communications, Inc. and its Subsidiaries, *Memorandum Opinion and Order*, 9 FCC Rcd 5836 (1994), *reconsideration denied on other grounds*, *Memorandum Opinion and Order on Reconsideration*, 10 FCC Rcd 11,786 (1995); *affirmed sub. nom. SBC Comm., Inc. v. FCC*, 56 F.3d 1484 (D.C. Cir. 1995) (hereinafter "*McCaw*").

### III. COMPETITIVE ANALYSIS UNDER PUBLIC INTEREST STANDARD

#### A. Analytical Framework

10. In our public interest analysis, we begin by evaluating the current state of competition in the relevant markets, and the likely competitive effects of the proposed merger. In conducting this evaluation, we focus on how the merger will likely affect competitive conditions in the relevant markets, compared with the competitive conditions that would likely exist in these markets if Nextel and PCI did not merge. We then consider any beneficial efficiencies that are likely to result from the merger. We also take into account other public interest benefits that are likely as a result of the merger. Considering these factors taken together, we then assess whether the proposed merger would be in the public interest. Following the Commission's clear precedent interpreting the public interest requirement of Section 310(b),<sup>20</sup> it is the applicants who bear the burden of demonstrating that the proposed transaction will enhance competition and thus be in the public interest.<sup>21</sup>

11. In conducting our public interest analysis of competitive conditions in markets affected by this proposed merger, we follow the approach taken by the Commission in *BA-NYNEX Order* and *BT-MCI Order*.<sup>22</sup> In these orders, we have followed the approach used in the *LEC In-Region Interexchange Order*, where the Commission found the Department of Justice and Federal Trade Commission 1992 *Horizontal Merger Guidelines*<sup>23</sup> to be a useful analytical tool for evaluating the likely competitive effects of mergers. In the *BA-NYNEX Order*, the Commission fully articulated its general approach to merger analysis in a case concerning the competitive effects of a merger between adjacent incumbent LECs while the po-competitive, market-opening process developed in the Telecommunications Act of 1996 ("1996 Act") is taking

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<sup>20</sup> 47 U.S.C. § 310(b).

<sup>21</sup> In the Applications of NYNEX Corporation and Bell Atlantic Corporation, *Memorandum Opinion and Order*, FCC 97-286 (rel. Aug. 14, 1997) ("*BA-NYNEX Order*") at ¶¶ 29, 36; In the Matter of the Merger of MCI Communications Corporation and British Telecommunications plc, *Memorandum Opinion and Order*, FCC 97-302 (rel. Sept. 24, 1997) ("*BT-MCI Order*") at ¶ 33. See also In re Applications of PacificCorp Holdings, Inc. and Century Telephone Enterprises, Inc., *Memorandum Opinion and Order*, DA 97-2225 (WTB 1997) ("*Century-Pacific Order*") at ¶ 12.

<sup>22</sup> Our analyses in the *BA-NYNEX Order*, the *BT-MCI Order*, and the *Century-Pacific Order* were based on the Commission's findings in the *Second Report and Order* in CC Docket No. 96-149 (*Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area*) and *Third Report and Order* in CC Docket No. 96-61 (*Policy and Rules Concerning the Interstate, Interexchange Marketplace*), FCC 97-142 (rel. Apr. 18, 1997) ("*LEC In-Region Interexchange Order*").

<sup>23</sup> Department of Justice and Federal Trade Commission 1992 *Horizontal Merger Guidelines*, 4 Trade Reg. Rep. (CCH) ¶ 13,154 (1992), 57 Fed. Reg. 41,552 (Sept. 10, 1992) ("*Guidelines*").

effect.<sup>24</sup> This approach is based heavily on both the *Guidelines* and the Commission's independent expertise which it has developed over several decades in its consideration of the distinguishing factors affecting competition in telecommunications markets. As a result, the Commission's framework is designed to ensure that its assessment of the competitive effects of a merger is based on generally accepted economic principles relating to market analysis.<sup>25</sup>

12. Our application of the Commission's public interest analysis in this order consists of four steps. First, we define the relevant product and geographic markets.<sup>26</sup> We note that, in defining relevant markets, we may distinguish "end-user markets," where the product or service is sold to end-user customers, and "input markets," where the product or service is sold to firms for use as an input to supply other products or services.<sup>27</sup>

13. Second, we identify current and potential participants in each relevant market, especially those that are likely to have a significant competitive effect on those markets.<sup>28</sup> In several recent mergers, the Commission has defined the most significant market participants to include both "actual competitors"<sup>29</sup> and "precluded competitors."<sup>30</sup> However, we determine that the markets examined in this proceeding are not characterized by the transitional forces contemplated in the *BA-NYNEX Order*, where the Commission's analysis focused primarily on markets involving wireline local exchange and exchange access services. Prior to passage and implementation of the 1996 Act, entry into these markets was severely constrained by regulatory and other barriers, and these markets have been *de facto* monopolies.<sup>31</sup> Accordingly, the Commission developed a framework to incorporate into its analysis of mergers the consideration of potential market entrants precluded from these wireline markets prior to 1996. Standard merger analysis considers potential entrants, whereas the precluded competition framework

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<sup>24</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996). See *BA-NYNEX Order* at ¶¶ 60-69.

<sup>25</sup> *LEC In-Region Interexchange Order* at ¶ 26.

<sup>26</sup> *BA-NYNEX Order* at ¶ 49; *BT-MCI Order* at ¶ 35.

<sup>27</sup> *Id.*

<sup>28</sup> *BT-MCI Order* at ¶ 36.

<sup>29</sup> In the *BA-NYNEX Order*, the Commission defined "actual competitors" as those firms that are now offering the relevant products in the relevant geographic markets and that the Commission expects will continue doing so as the 1996 Act, and particularly Sections 251, 252, and 271, become more fully implemented. *BA-NYNEX Order* at ¶ 59 (footnotes omitted).

<sup>30</sup> In the *BA-NYNEX Order*, the Commission explained that "precluded competitors" were firms that were most likely to have entered the relevant markets, but, until recently, had been prevented or deterred from market participation by barriers that the 1996 Act seeks to lower. *BA-NYNEX Order* at ¶ 60.

<sup>31</sup> *LEC In-Region Interexchange Order* at ¶ 100.

reflects the fact that local exchange markets are in the virtually unprecedented situation of a monopolized market on the verge of experiencing entry from a potentially large number of sources, including adjoining monopolists.

14. By contrast, conditions in the markets examined in this order -- mobile phone services and dispatch services -- are quite different. First, wireless markets are generally characterized by more competition. For example, individual markets for interconnected mobile phone services have had two cellular licensees with significant presence for more than a decade, and our recent broadband PCS licensing is contributing to further ongoing market entry. Second, mobile communications markets have been characterized by less restrictive regulatory barriers to entry. The Commission has greatly expanded licensing opportunities in recent years, and at present, expects to continue doing so. Moreover, greater flexibility is being afforded to licensees in their use of the spectrum they do acquire. While non-regulatory barriers to entry may also serve to limit competition in these wireless markets, we have no evidence indicating that any substantial lifting of these barriers has occurred or is imminent, which would otherwise warrant our examination of formerly precluded competitors. Hence, we do not identify precluded competitors, but consider instead potential market participants. In light of the considerable sunk costs involved in supplying the relevant services, we give consideration only to potential entrants capable of achieving significant market impact within a two-year horizon.<sup>32</sup>

15. Third, we evaluate the effects that the merger may have on competition in the relevant markets.<sup>33</sup> In the case of the proposed merger between Nextel and PCI, the transaction is between firms that provide similar services (a "horizontal" relationship) as opposed to a transaction between a firm that is a significant producer of a product or service that is used by the other firm in its operations (a "vertical" relationship). As a result, we confine our analysis in this order to the potential horizontal effects of the proposed merger.

16. Where a relevant market is concentrated and a merger results in a firm that controls a significant portion of this market, a merger in the absence of regulation may increase the ability of the merged firm to profitably exercise unilateral market power (or may slow any decline in this ability) by raising its price above competitive levels.<sup>34</sup> Alternatively, where the relevant market is concentrated, a merger may also increase the ability of a relatively small number of significant market participants, including the merged firm, to exercise market power

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<sup>32</sup> *Guidelines* at § 3.2.

<sup>33</sup> *See Guidelines* at 41558 §§ 2.1, 2.2.

<sup>34</sup> *BT-MCI Order* at ¶ 37. *See also LEC In-Region Interexchange Order* at ¶¶ 11, 83; Policy and Rules Concerning Rates for Competitive Carrier Services and Facilities Authorizations Therefor, *Fourth Report and Order*, 95 FCC 2d 554, 558 (1983).



through coordinated action, either by increasing price or restricting output.<sup>35</sup> Where the relevant market is a final product market, consumers could be directly injured through increased prices or reduced quality. Where the relevant product is an input market, end-users may be indirectly injured to the extent that suppliers of the final good can, and do, pass higher input prices on to end-users in the form of higher final product prices. We note that, for either unilateral or coordinated horizontal effects to occur, the merged firm, or a group of firms, must possess market power in the relevant product market.<sup>36</sup>

17. Fourth, we consider whether the proposed transaction will result in merger-specific efficiencies such as cost reductions, productivity enhancements, or improved incentives for innovation.<sup>37</sup> Our assessment takes into account any pro-competitive commitments made by the parties.<sup>38</sup> In addition to our analysis of merger-specific efficiencies, which is consistent with the approach taken in the 1997 revisions to the *Guidelines*, we consider whether the merger is likely to produce other public interest benefits. Ultimately, we must weigh any competing harmful and beneficial effects to determine whether, on balance, the merger is likely to enhance competition in the relevant markets.

## B. Market Definition

### 1. Market Definition—Principles

18. We begin our competitive analysis by determining the relevant product and geographic markets. To do so, we identify the products (or herein, services) offered by Nextel and PCI, and evaluate the extent to which services offered by other communications companies compete for the business conducted by the merging parties. Broad guidance for this inquiry is provided by the *Guidelines*:

A market is defined as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future producer or seller

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<sup>35</sup> 1992 *Horizontal Merger Guidelines*, 57 Fed. Reg. at 45558-45559 §§ 2.0-2.1. The 1992 *Horizontal Merger Guidelines* define "coordinated interaction" as being "comprised of actions by a group of firms that are profitable for each of them only as a result of the accommodating reactions of the others. This behavior includes tacit or express collusion, and may or may not be lawful in and of itself." *Id.* at 41558 § 2.1.

<sup>36</sup> *BT-MCI Order* at ¶ 37.

<sup>37</sup> See *Revision to the Horizontal Merger Guidelines Issued by the U.S. Department of Justice and the Federal Trade Commission*, April 8, 1997.

<sup>38</sup> *BA-NYNEX Order* at ¶ 37 (citing Implementation of Sections 11 and 13 of the Cable Television Consumer Protection and Competition Act of 1992 Horizontal and Vertical Ownership Limits, MM Docket No. 92-264, *Second Report and Order*, 8 FCC Rcd 8565)); Michael H. Riordan & Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 Antitrust L.J. 513 (1995).

of those products in that area likely would impose at least a "small but significant and nontransitory" increase in price, assuming the terms of sale of all other products are held constant. A relevant market is a group of products and a geographic area that is *no bigger than necessary* to satisfy this test.<sup>39</sup>

Essentially, we define relevant product markets for goods or services in a manner ensuring that there are no close substitutes in demand.<sup>40</sup> We recognize that relevant product markets may change over time. For example, as competition increases and more telecommunications carriers enter each others' markets, we note that wireless carriers are increasingly bundling packages of telecommunications services. As more carriers offer bundles of services, consumer expectations and perceptions of relevant products may change. To the extent that large numbers of consumers come to expect and demand bundled product offerings, and carriers supply such offerings, the bundled product offerings may well become a separate relevant product market. Moreover, within a particular relevant product market, it may also be appropriate to identify and separately aggregate groups of consumers with distinguishable demand patterns.<sup>41</sup>

19. In defining commercial mobile radio services ("CMRS"), the Commission determined that actual competition among certain CMRS services exists already and the potential for competition among all CMRS services appears likely to increase over time due to expanding consumer demand and technological innovation.<sup>42</sup> The Commission determined that adopting a narrow definition of the CMRS marketplace would have the effect of permitting disparate application of the Commission's rules as they apply to CMRS carriers and reclassified private carriers.<sup>43</sup> The Commission concluded that this would undermine the Commission's goal, and Congressional mandate, to create a symmetrical regulatory structure for all CMRS carriers.<sup>44</sup>

20. This inclusive definition of the CMRS market has been applied in previous

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<sup>39</sup> *Guidelines* at § 1.0, emphasis added.

<sup>40</sup> Alternatively, we may define the relevant product market to encompass a group of similar services, where each service is a good substitute for another, but where, for the group as a whole, there are no other close substitutes in demand. *LEC In-Region Interexchange Order* at ¶¶ 5, 31, and 40.

<sup>41</sup> In the *BA-NYNEX Order*, for example, the Commission concluded that "there are at least three customer groups that can be identified as having similar patterns of demand: 1) residential customers and small businesses; 2) medium-sized businesses; and 3) large businesses/government users." *Id.* at ¶ 53.

<sup>42</sup> See Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, GN Docket No. 93-52, *Third Report and Order*, 9 FCC Rcd 7988 (1994) ("*CMRS Third Report and Order*").

<sup>43</sup> *Id.* at 8010.

<sup>44</sup> *Id.*

transfers and acquisitions of SMR systems, including several significant acquisitions by Nextel.<sup>45</sup> In these proceedings, the Bureau determined that all terrestrial CMRS services—including paging, SMR, PCS, and cellular—are actual or potential competitors with one another, and should be regarded as substantially similar for regulatory purposes.<sup>46</sup> The Bureau concluded that the expansive product market definition was consistent with that adopted by the Commission in the *CMRS Third Report and Order* for purposes of determining substantial similarity among CMRS offerings.<sup>47</sup>

21. In many policy contexts this perspective has been appropriate, and continues to be, as mobile service carriers operating on different frequencies expand their offerings to serve a wider range of consumer needs. From this perspective the industry is indeed converging, as companies increasingly offer new services that result in competition between providers where no such competition existed before. Nevertheless, in the context of our analysis of mergers, we are required to examine the extent to which consumers can obtain the services they desire from multiple competing sources. These demands tend to be more narrowly defined. Some products may satisfy them, while others may not. Hence, our focus in merger analysis is on a merger's impact on competition in the provision of the particular services offered, and any others that may meet these needs. It is not necessarily on the competition between mobile service carriers, *per se*.

22. Not only does the Commission have the authority to narrowly define product markets if it so deems necessary,<sup>48</sup> the Commission expressly anticipated the need to define relevant product and geographic markets more narrowly in the *Second Annual CMRS Competition Report*. Therein, the Commission stated that "an individual proceeding in which the Commission defines relevant product and geographic markets, such as a proposed license transfer, may present facts pointing to a narrower or broader product market definition than that used in this report."<sup>49</sup>

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<sup>45</sup> See generally *Applications of Nextel Communications, Inc. for Transfer of Control of OneComm Corporation*, 10 FCC Rcd 3361 (WTB 1995) ("OneComm"); *Applications of Motorola, Inc. for consent to assign 800 MHz licenses to Nextel Communications, Inc.*, 10 FCC Rcd 7783 (WTB 1995) ("Motorola"); *Applications of Dial Page, Inc. for Consent to Transfer of Control of Dial Call, Inc. SMR and Business Radio Licenses to Nextel Communications, Inc.*, DA 95-2379 (WTB, Nov. 22, 1995).

<sup>46</sup> *OneComm*, 10 FCC Rcd at 3364.

<sup>47</sup> *Motorola*, 10 FCC Rcd at 7786.

<sup>48</sup> For instance, in the AT&T/McCaw merger, the Commission defined relevant product and geographic markets as "interexchange services in U.S., local cellular service in each MSA or RSA, and the manufacture of cellular network equipment in North America." *McCaw*, 9 FCC Rcd 5836, 5843-44 & n. 25; *Bell Atlantic Mobile Systems, Inc. and NYNEX Mobile Comm. Co., Order*, 10 FCC Rcd 13368, 13373 & n. 19 (WTB 1995), *application for review pending on other grounds* ("BAMS-NYNEX Mobile").

<sup>49</sup> See *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Second Report*, FCC 97-75, p.1 (rel. March 25, 1997) ("*Second Annual CMRS Competition Report*"), citing *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, First*

## 2. Relevant Markets—Analysis

### a) Relevant Product Markets

23. PCI principally offers interconnected mobile phone and dispatch services—and uses primarily its 800 MHz SMR spectrum to do so.<sup>50</sup> PCI's service area extends throughout the states of Texas, New Mexico, Oklahoma, and Arizona and includes portions of Colorado, North Dakota, and South Dakota. PCI's SMR systems "are largely contiguous and offer some of the extended coverage characteristics of cellular systems."<sup>51</sup> Nextel provides services similar to those offered by PCI, but with its broader collection of licenses is approaching a nationwide footprint. In some localities, Nextel also offers an integrated digital communications service package that combines and enhances the functional capabilities of its dispatch and mobile phone services, together with messaging capability. Hence, in light of the available evidence, interconnected mobile phone services and dispatch services constitute the relevant product markets. ]x

### b) Interconnected Mobile Phone Services

24. We determine that our first relevant product market—interconnected mobile phone services—comprises all commercially available two-way, mobile voice telephony services encompassing access to the public switched telephone network ("PSTN"), such as those provided by cellular companies, personal communications service ("PCS") providers, and interconnected, trunked SMR carriers.<sup>52</sup> Following the *Guidelines*, we have considered whether consumers regard the range of alternative services taken together as a substitute for mobile phone services.

25. As an initial matter, we observe that the group of mobile phone services included in this relevant product market all provide essentially the same functionality—two-way,

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*Report*, 10 FCC Rcd 8844, 8866, n.137 (1995) ("*First Annual CMRS Competition Report*").

<sup>50</sup> PCI also offers data messaging and telemetry services and holds 900 MHz licenses in four MTAs in the southwestern region. PCI Form 10-K at 4, 6.

<sup>51</sup> *Id.* at 4.

<sup>52</sup> We include herein both conventional SMR operators and wide-area digital SMR operators. Wide-area digital SMR providers have sometimes been referred to in the industry as enhanced SMRs (or "ESMRs") to reflect their ability to offer an expanded array of service capabilities (e.g. paging, data transmission, positioning) made possible by the carrier's adoption of digital network systems. For purposes of this order, we refer to such entities as digital SMRs. As discussed below, digital SMRs provide mobile phone services primarily to urban customers, while analog SMRs serve principally rural areas.

In the relatively near future, mobile phone service may also be available from satellite-based operators. However, these services appear to be targeted toward global business travelers and users in remote, underserved locales and will command premium pricing. Hence, these services are unlikely to be perceived as substitutes by consumers of the mobile phone services relevant to this proceeding.

interconnected, mobile voice telephone service. The majority of mobile phone service providers offer their services at roughly similar price levels. According to an annual survey sponsored by the American Mobile Telephone Association, SMR operators' average monthly revenues per unit for interconnected service were \$50.10 during 1996,<sup>53</sup> not substantially different from the \$47.70 figure reported for cellular subscribers during the same period.<sup>54</sup> PCI reports that it charges a fixed rate of \$40 per month for an unlimited number of interconnected mobile phone calls of up to five minutes in length.<sup>55</sup>

26. Like analog SMR, mobile phone services offered by digital SMRs appear to be quite price competitive with services offered by cellular and PCS carriers, especially for higher-volume users.<sup>56</sup> More precise comparisons are not possible because of the variety of rate plans offered and the integration of other services with mobile phone capabilities. Nevertheless, one securities firm estimates that over the period 1997-1999, digital SMR providers will capture four to seven percent of net incremental growth in subscriptions for cellular-like services.<sup>57</sup> Businesses appear to be finding digital SMR-based interconnection offerings appealing because of the versatility of the package relative to the current range of cellular and PCS services. Finally, we observe that Nextel is advertising itself as a direct competitor to cellular.<sup>58</sup> Accordingly, we include interconnected mobile phone services provided by digital SMR carriers as part of this product market.

27. We have also considered information available on consumers' inclinations to switch between mobile phone services and other individual communications services (particularly potential substitutes like public payphones, pagers, private wireline services, etc.) in response to price changes or other competitive signals.<sup>59</sup> Consumers appear to perceive these various services

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<sup>53</sup> Land Mobile Radio News, "SMR operators headed for second straight year of 13% growth" (Nov. 22, 1996). These data reflect primarily sales of analog interconnection services. Nextel reportedly earns an average of about \$63 per subscriber unit on its digital SMR services, which include mobile phone service but typically other services as well. Washington Post, "Nextel Communications reports broader losses" (Aug. 12, 1997) at C3.

<sup>54</sup> *Second Annual CMRS Competition Report* at 10.

<sup>55</sup> PCI Form 10-K at 7.

<sup>56</sup> In the future, it may be appropriate to define separate markets for business and personal use of mobile phone services. However, given the recent introduction and continuing evolution of digital SMR service plans, and the likelihood that many mobile phone subscribers use their cell phones for both business and personal use, we determine that it would be inappropriate to do so at this time.

 <sup>57</sup> Bear Stearns, *Wireless Telephony* (April 1997) at 24 (Table 4).

<sup>58</sup> See *infra* at ¶¶ 46, 69, 70.

<sup>59</sup> For a general discussion of competition between wireline and wireless services, see the *Second Annual CMRS Competition Report* at 53-56; and *BA-NYNEX Order*, ¶¶ 89-91. In these proceedings, the Commission has determined that mobile communications services are largely complementary to wireline services, but that providers

to be distinct, and the Commission has previously recognized that mobile communications services can be distinguished on the basis of functional differences.<sup>60</sup>

28. Some evidence is available on the costs that customers would incur to switch among communications products. In the past, it was costly for potential customers to subscribe to mobile phone services because of expensive handsets/mobile units, and costly for existing subscribers to switch carriers, because of service contracts. However, retail prices for mobile phones have fallen dramatically and the elimination of contracts by some providers has further reduced the cost consumers now face when contemplating a switch to another vendor. Both trends support a view that mobile phone services offered by cellular and PCS providers belong in the same market. SMR providers have not yet adopted these particular aggressive mass-market strategies. However, there appear to be well-developed markets for used SMR equipment<sup>61</sup> that would reduce the net cost of switching between providers operating with different technical standards.<sup>62</sup>

29. While a variety of communications services now exist to serve the mobile work force, only mobile phone services provide users with interconnection to the public switched network and thereby allow them to communicate on an immediate, two-way, voice basis while mobile. Hence, there appears to be no basis for broadening the relevant product market beyond interconnected mobile phone services, as defined above.

c) Dispatch Services

30. We define the market for dispatch services as including commercial dispatch

of wireless services are potential competitors, and hence, may offer substitutes for wireline services in the future.

<sup>60</sup> *First Annual CMRS Competition Report*, 10 FCC Rcd at 8864. The Department of Justice has also defined separate markets within the scope of terrestrial wireless services, distinguishing expressly between mobile phone and dispatch services. Essentially, DOJ found that trunked SMRs compete in markets for mobile phone services, but only in rural areas and smaller cities where SMRs are able to provide reliable interconnection services. By contrast, DOJ determined that in larger cities, cellular and trunked SMR services belong to different markets because urban SMRs encounter spectrum congestion and cannot reliably offer interconnection. SMRs instead provide dispatch services in these urban areas. *United States v. Motorola and Nextel*, 60 Fed. Reg. 19,284, at p. 9 and n.24.

<sup>61</sup> See generally the advertisements furnished by Nextel and PCI in attachments to their public interest statements. For example, Sterling Associates advertises that it purchases and sells LTR-800 MHz equipment by EF Johnson, Kenwood, and Uniden in *Radio Resource Magazine* (April 1997) at 124. Two-way Communications, Inc. advertises used 800 MHz equipment on same page.

<sup>62</sup> Existing subscribers may face switching costs even when electing to change vendors operating within the same frequency band. For instance, competing PCS companies currently provide service based on different standards whose systems are not interoperable. Similar circumstances hold true for 800 MHz SMR operators. PCI Form 10-K at 16. *Second Annual CMRS Competition Report* at 39.

services offered by carriers operating at 800 MHz, 900 MHz, and 220 MHz.<sup>63</sup> This definition includes both private (one-to-one) and fleet (one-to-many) dispatch services, whether offered via trunked analog or digital systems.<sup>64</sup> We also include the commercial dispatch services offered by qualified private land mobile operators.<sup>65</sup> We exclude non-trunked (conventional) analog dispatch services, however, because of less reliable system access and the loss of privacy due to sharing of fixed channel assignments.<sup>66</sup>

31. Accordingly, we have investigated the extent to which dispatch consumers would likely be prepared to switch to alternative telecommunications services in the event of a small but significant price increase imposed on dispatch services by all market suppliers. Stated differently, we have considered alternatives to dispatch service and examined whether consumers perceive these alternatives to be good substitutes.

32. In major metropolitan areas, taxicab and construction companies are typical dispatch subscribers.<sup>67</sup> According to one recent annual survey, monthly revenues for SMRs' voice dispatch services averaged \$16.40 per unit during 1996. Rates ranged from \$8 per month per unit in rural areas to \$24 in cities.<sup>68</sup> These services typically provide unlimited airtime or assess airtime charges only on calls exceeding a given duration. Few other mobile communication services are priced this affordably, and aside from private or digital SMR providers, none offer instant, one-to-many mobile phone services. Conference calling via cellular phones over the PSTN, for example, is both far more inconvenient to arrange and generally much more expensive.

33. One alternative to which an analog dispatch consumer may turn, where available, is to a digital dispatch service provider. Digital dispatch services are typically provided in conjunction with other mobile communications services in packages bundling free airtime,

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<sup>63</sup> UHF bands at 150 MHz and 450 MHz are assigned in channel pairs and are thus well suited to dispatch use. However, much of this spectrum capacity has been committed to one-way (paging) applications. To the extent that this capacity is being used to provide private dispatch services, opportunities to offer commercial services are limited.

<sup>64</sup> Trunking allows a number of users to share a multi-channel system by electronically searching for and assigning an open frequency to a particular user only when use of the system is desired.

<sup>65</sup> Private mobile radio service ("PMRS") operators can provide dispatch service to others on a for-profit basis and still be classified as PMRS as long as they are not connected to the PSTN. The PMRS category includes Industrial Radio Services and Land Transportation Radio Services. *First Annual CMRS Competition Report*, 10 FCC Rcd at 8861-8863.

<sup>66</sup> DOJ also reached this assessment in *United States v. Motorola and Nextel*, 60 Fed. Reg. 19,284 at p.2 and n.24.

<sup>67</sup> PCI Form 10-K at 3.

<sup>68</sup> Land Mobile Radio News, "SMR operators headed for second straight year of 13% growth" (Nov. 22, 1996).

measured service, and other features in combinations at different monthly access rates.<sup>69</sup> Hence, the relative cost of subscribing to conventional analog services versus digital dispatch services depends on the volume of dispatch service used and the cost of contracting elsewhere for complementary cellular or paging services. As a general matter, this cannot be readily determined for a representative cross-section of businesses. Nevertheless, data furnished by Nextel on its subscribership levels in localities where digital services have been deployed suggest that a significant number of subscribers have regarded analog and digital services as competitive.<sup>70</sup>

34. Dispatch capability is also available on a commercial basis from operators using private land mobile frequencies. However, most private systems utilize virtually all of their allocated channel capacity,<sup>71</sup> limiting the extent to which dispatch consumers can avail themselves of this spectrum. Moreover, PMRS customers do not obtain exclusive channel use and broad eligibility is available only on private frequencies below 800 MHz. As an alternative to purchasing service from a communications provider, businesses with customized requirements may also choose to acquire licenses to use spectrum, construct transmission facilities, and then operate their own dispatch networks.<sup>72</sup> However, this option would require companies with businesses outside of communications to divert significant resources to the establishment, operation and maintenance of communications systems. This alternative is unlikely to be viable for small businesses under most circumstances. Even for many larger businesses, more than a "small but significant" increase in price from a commercial dispatch monopoly would be needed to prompt a decision to establish a private system.

35. Hence, we conclude that businesses that have traditionally relied on dispatch capability demand the practical convenience of instant one-to-many voice communications needed to facilitate communications among work teams. This capability would be diminished, if not lost, by using other types of communications services that do not provide dispatch capability. Hence, we believe that a small but significant price change by a monopoly provider of dispatch services would be unlikely to spur many consumers to turn instead to non-dispatch services. Thus, the

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<sup>69</sup> Nextel Public Interest Statement (May 15, 1997) at Conf. Attachment A-70 through A-113. Nextel furnished the Commission with current pricing plans for its regional digital service packages. We observe from this information that Nextel does not typically offer dispatch-only digital service plans. Hence, Nextel's bundled packaging requires digital dispatch customers to purchase interconnection and messaging services, whether desired or not.

<sup>70</sup> *Id.* at Conf. Attachment A-8.

<sup>71</sup> *United States v. Motorola and Nextel*, 60 Fed. Reg. 19,284 at p.26.

<sup>72</sup> For example, in 1993, United Parcel Service considered building its own private network to serve its nationwide fleet of delivery vehicles. Contracting for service through SMR providers was also considered. Ultimately, however, UPS committed to the purchase of cellular service and data terminals from an established provider. Advanced Wireless Communications, "UPS tells why it chose cellular for new national data network" (Feb. 17, 1993).



relevant product market includes all trunked dispatch services, whether provided by CMRS operators or PMRS companies on a commercial (for-profit) basis, and whether provided over analog or digital systems.

d) Bundled Digital SMR Services

36. At this time, we do not find that bundled digital SMR services constitute a distinct product market. Rather, digital SMR providers compete for consumers that may otherwise purchase these multiple services separately from several providers specializing in these discrete services. Nextel's own statements regarding its marketing strategy provide compelling evidence that these various communications services—namely mobile voice, dispatch, messaging, and data services—are perceived by consumers to be complements, rather than substitutes, for one another. Nextel has built its business plan around the concept that a significant number of consumers demand an integrated communications package featuring combinations of these capabilities.<sup>73</sup> As the basis for its plan, Nextel has apparently taken note that many of its analog dispatch customers also subscribe to cellular phones and/or pagers.<sup>74</sup> Independent market research supports this assessment.<sup>75</sup>

e) Relevant Geographic Markets—Analysis

37. A properly defined geographic market aggregates consumers that face similar choices regarding vendors of a particular product or service.<sup>76</sup> Generally, communications products satisfy an individual customer's needs to the extent that a provider's transmission facilities accommodate that customer's point-to-point communications requirements. For the mobile communications services at issue in this proceeding, demand is indeed for transmission capability between two points, but where the transmission encompasses both origination and termination, and where one or more parties are mobile. Thus, following the approach to geographic market definition adopted in the *LEC In-Region Interexchange Order*, we define the relevant geographic markets for these services on a general level to be all possible routes that allow for complete end-to-end transmissions between two particular locations (i.e., point-to-point markets), but recognize that the points of origination and/or termination may not be fixed in location. The *LEC In-Region Interexchange Order* also noted that when a group of point-to-point markets exhibit sufficiently similar competitive characteristics (i.e., market structure), we may

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<sup>73</sup> Nextel Form 10-K at 3-4, 11-15.

<sup>74</sup> See Nextel Public Interest Statement (May 15, 1997) at 4, n.10.

<sup>75</sup> See generally Eligibility for the Specialized Mobile Radio Services and Radio Services in the 220-222 MHz Land Mobile Band and Use of Radio Dispatch Communication, *Memorandum Opinion and Order*, FCC 97-213, ¶ 9 and n. 32. (rel. June 30, 1997).

<sup>76</sup> See, e.g., *Tampa Elec. Co. v. Nashville Co.*, 365 U.S. 320, 327 (1961).